

Appln No. 09/522,185  
Amdt date September 28, 2005  
Reply to Office action of June 29, 2005

**REMARKS/ARGUMENTS**

Claims 1, 3 - 12, 26, 38 - 48, 49, 74, and 91 were pending when the Application was last examined of which claims 1, 26, 49, and 74 were independent. Independent claims 1, 26, 49, and 74 are amended. New claims 175 - 178 are added of which claims 175 and 178 are independent. Claims 1, 3 - 12, 26, 38 - 48, 49, 74, 91, and 175 - 178 are now pending.

Claims 26, 38 - 48, 74, and 91 are rejected under 35 U.S.C. 102(e) as being unpatentable over Arimilli (U.S. 6,515,984). According to the Office Action, Arimilli discloses voice exchange for exchanging voice signals between a network line and a packet based network. The Office Action cites to "voice data going from e.g., voice/fax channel to packet network 313, Fig. 3, 4A, 5A; bidirectional voice, Fig. 6C".

Applicants respectfully submit that Arimilli is not directed to packet based networks. Rather, Arimilli's "composite link 313" is a circuit switched network. According to the Wikipedia Encyclopedia: "In computer networking and telecommunications, packet switching is the now-dominant communication paradigm .... This contrasts with the principal other paradigm, circuit switching, which sets up a dedicated connection between the two nodes for their exclusive use for the duration of the communication." ([http://en.wikipedia.org/wiki/Packet-switched\\_network](http://en.wikipedia.org/wiki/Packet-switched_network)). The passages of Arimilli that are cited in the following paragraph indicate that the "composite link 313" of Arimilli operates based on dedicated connections and is therefore a circuit switched network.

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The composite link 313 of Arimilli "may be an analog line such as a public telephone line using synchronous modems, a private leased line using synchronous modems or a digital line using DSU (Digital Service Units)." (Arimilli, Column 5, lines 9 - 13). "The composite link 315 [sic] may be a digital or analog network link, a simple analog leased line, a four-wire leased line or private line." (Arimilli, Column 6, lines 8 - 12). "[T]he preferred implementation of data voice/fax/multiplexer 300 is shown with two dedicated lines 313a and 313b connected to ports 403a and 403b respectively. Network ports 403a and 403b each interface to separate lines using dedicated synchronous modems 314 for analog lines or to DSU's (Data Service Units) for digital lines." (Arimilli, Column 6, lines 59 - 65, underlining added). The above passages indicate that Arimilli uses public telephone lines or similar dedicated connections and is therefore directed to a circuit switched network.

On the other hand, the independent claims of the current Application, claims 1, 26, 49, and 74, all include a "packet based network" language that sets them apart from Arimilli. The Background section of the Application emphasizes the need for interfacing telephony devices to packet based networks:

Telephony devices, such as telephones, analog fax machines, and data modems, have traditionally utilized circuit switched networks to communicate. With the current state of technology, it is desirable for telephony devices to communicate over the Internet, or

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other packet based networks. Heretofore, an integrated system for interfacing various telephony devices over packet based networks has been difficult due to the different modulation schemes of the telephony devices. Accordingly, it would be advantageous to have an efficient and robust integrated system for the exchange of voice, fax data and modem data between telephony devices and packet based networks.

(Underlining added).

As the above passage from the specification indicates, the term "packet based network" is used in contrast to the term "circuit switched network" and is therefore synonymous with the term "packet switched network." Moreover, Wikipedia's definition of packet switching continues with "The most well-known of the packet switching model is the Internet, which is a packet switched network ...." ([http://en.wikipedia.org/wiki/Packet-switched\\_network](http://en.wikipedia.org/wiki/Packet-switched_network)). The specification cites to the Internet as an example of "packet based networks." Based on the above observations, the terms "packet switched network" and "packet based network" are interchangeable.

Claims 1, 3 - 12, and 49 are also rejected under 35 U.S.C. 103(a) as unpatentable over Arimilli in view of Wu (U.S. 6,002,722). Wu was cited for teaching the use of codes to negotiate modem rates. Wu is directed to use of the modem with a Digital Subscriber Line (DSL). DSL uses the extra capacity of ordinary copper telephone lines for digital communications and

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is not packet switched. Further, Wu predominantly deals with POTS and ISDN that are circuit switched technologies. Being directed to circuit switched networks, Wu does not cure the deficiency of Arimilli. As a result, Wu and Arimilli alone or in combination do not teach or suggest all of the limitations of the independent claims of this Application.

In short, independent claims 1, 26, 49, and 74 define a novel and unobvious invention over the cited references. Remaining dependent claims 3 - 12, 38 - 48, and 91 are dependent from claims 1, 26, and 74 respectively. These dependent claims include all the limitations of their respective independent claims and additional limitations therein. Accordingly, these claims are also allowable over the cited references, as being dependent from allowable independent claims and for the additional limitations they include.

New claims 175 - 178 are added that are allowable because these claims are directed to "packet based networks" that are not taught or suggested by the cited references alone or in combination. Further, new independent claim 175 includes the additional limitations of "depacketizing an incoming packetized signal from the packet based network [and] identifying the depacketized signal as a voice signal, a fax signal, or a data signal" that are not taught or suggested by Arimilli, Wu, or their combination. Also, new independent claim 178 includes the additional limitation of "packetizing a voice signal, a fax signal, or a data signal in a packetization engine to generate a packetized signal" that is not taught or suggested Arimilli, Wu, or their combination.

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In view of the foregoing amendments and remarks, it is respectfully submitted that this Application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Respectfully submitted,

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